

• In this issue •

This issue starts with a review of advances in genetic studies about substance abuse in China by Sun and colleagues.^[1] The growing prominence of this problem has been recently highlighted with the publication of the 2010 Global Burden of Disease results for China,^[2] which reported that the use of tobacco, alcohol and illicit drugs were the 3rd, 7th, and 12th most important causes of ill-health in the country, respectively. Other studies^[3,4] have shown that the demographic pattern of smoking and alcohol use in China is quite different from that reported in most other countries: in China the age of initiation of regular use is older and the prevalence of use in females is much lower. Understanding the relative contributions of genetic, environmental and cultural factors to understanding these observed cross-national patterns of substance abuse would make a substantial contribution to our understanding of these conditions and, thus, improve our ability to develop effective interventions. This review on genetic studies by Sun describes the current state of the art in China, showing where findings from China parallel those from other countries and, more importantly, the areas where unique findings from China have contributed to the international corpus of knowledge about these important conditions.

The systematic review and meta-analysis by Qian and colleagues^[5] focuses on a topic that has received relatively little attention in the Chinese literature – eating disorders. The authors conducted an exhaustive search of the international and Chinese literature to identify community-based studies about the prevalence of eating disorders. Only 15 studies were of sufficient quality to be included in the analysis; none of them were conducted in China and only one was conducted in Asia (South Korea). The reported prevalence varied widely from study to study, possibly because different studies included different conditions under the ‘eating disorder’ rubric (which variously included anorexia nervosa, bulimia nervosa, binge eating disorder and other or atypical eating disorders) or because of the use of different operational criteria for the specific conditions over time. The overall conclusions, which can only be considered suggestive, were that eating disorders are relatively common, more common in women than in men, increasing over time, and more prevalent in Western than in Asian countries. Clearly, more high-quality epidemiological work that uses standardized diagnostic criteria is needed, particularly in low- and middle-income countries.

The first original research article in the issue by Wang and colleagues^[6] discusses a survey that aims to assess mental health literacy in a representative sample of 1953 adults living in Shanghai. This study is the Shanghai-component of a national effort by the Ministry of Health^[7] to annually monitor awareness of mental health issues among community members. Given the very low rates of care-seeking among persons with current mental disorders in the country,^[4] monitoring mental health literacy was an important component of China’s new

mental health law^[8] (which came into effect on 1 May 2013). These surveys are considered an essential first step to decreasing the stigma associated with mental illnesses and, thus, changing attitudes about seeking help for these types of problems. Ideally, these annual surveys can be used to assess the effectiveness of the mental health promotion campaigns that are envisioned in the law. In the Shanghai survey, respondents correctly answered 72% of the 20 questions related to mental health knowledge, but the identification of specific disorders described in five vignettes was poor, ranging from a low of 19% for schizophrenia with predominantly negative symptoms to a high of 42% for mania. However, detailed factor analysis of the Shanghai results indicated that the constructs covered by the measures used by the Ministry of Health to assess mental health literacy are not clearly defined; and the lack of rigorous assessment of the reliability and validity of the instruments is concerning. More qualitative and quantitative research is needed to revise the scales before they can reliably monitor changes in mental health literacy over time.

The second original research article by Jiang and colleagues^[9] discusses the characteristics and treatment-seeking of children with the most common pediatric mental disorder in China – Attention-Deficit/Hyperactivity Disorder (ADHD). Over a 12-year period children with ADHD accounted for about one-third of all new patients seen at Shanghai’s largest child and adolescent counseling clinic situated at the Shanghai Mental Health Center, but this proportion has been dropping over time as other diagnoses become more prominent. As is true in other countries, about 80% of the ADHD patients are male and the vast majority of them are treated with central nervous system stimulants, though the adjunctive use of behavior treatments has increased in recent years. Despite a tendency to earlier identification, most children with ADHD are ill for at least 2 years before their first diagnosis and treatment. Increased efforts to educate parents and teachers in China about this important condition and to decrease the stigma associated with receiving treatment for the condition are needed to speed up the recognition and treatment of children with ADHD.

The third original research article by Zhu and colleagues^[10] describes a randomized controlled trial that was conducted as part of the approval process required by the State Food and Drug Administration of China prior to the clinical use of generic memantine hydrochloride manufactured in China in the treatment of moderate to severe Alzheimer’s Disease (AD). The prevalence of AD in China has been increasing dramatically, partly due to the rapid aging of the population,^[11] so this is a major public health problem that has not, as yet, been effectively addressed. In the absence of an effective treatment for AD, efforts have been focused on slowing the progressive decline in cognitive functioning that typically occurs in individuals with the condition. Memantine is one promising agent that has been shown

to be effective in large studies conducted in several countries, including China. However, this medication needs to be used continuously to be effective so it can be quite costly for families and for national health insurance systems. The use of a generic form of the medication would reduce the cost by over 50%, so this is an important development in the treatment of the condition for low- and middle-income countries trying to reduce overall health expenditures. The current study compares the efficacy and safety of locally manufactured generic memantine to that of imported proprietary memantine in a 16-week, double-blind, randomized controlled trial among individuals with moderate to severe AD. As expected, there were no significant differences between the two groups. Further study is needed to confirm the long-term efficacy and safety of the generic form of memantine, and cost-effectiveness studies are needed to demonstrate the extent to which using this generic medication will reduce the financial burden of families caring for elders with AD and the health care costs of governments dealing with rapidly aging populations.

The Forum by Wang and Xu^[12] discusses the use of Transcranial Magnetic Stimulation (rTMS) as a treatment for medication-resistant auditory hallucinations in schizophrenia. There have been several meta-analyses about this issue that generally support the safety and effectiveness of rTMS for the management of auditory hallucinations in schizophrenia, but the sample sizes of the studies included in these meta-analyses are typically quite small. Moreover, as the techniques for administering sham rTMS—the most common comparison group in the reported RCTs—have improved over time, the pooled effect sizes for rTMS have tended to get smaller. More work is needed before rTMS can be recommended as a standard adjunctive treatment for medication-resistant auditory hallucinations. First, larger-sample RCTs are needed to confirm its effectiveness, and then comparison studies will be needed to determine the appropriate intensity, location, and duration of the rTMS treatments.

The case report^[13] about a case of recurrent neuroleptic malignant syndrome is a reminder to all clinicians who use antipsychotic medications. This life threatening condition, that often mimics a rapidly developing severe infection, can occur at any dose of any antipsychotic medication. The risk is greater in individuals receiving multiple antipsychotic medications and in older individuals in whom the medications and their active metabolites may accumulate due to hepatic or renal abnormalities that delay the normal breakdown of these compounds. Given the increasing use of antipsychotic medications by non-psychiatric physicians (particularly for nursing home residents), focused training is needed to ensure that they remain vigilant about the risk of neuroleptic malignant syndrome.

Finally the biostatistics in psychiatry paper^[14] discusses power analysis and sample size, a bread-and-butter issue for all researchers. Lu and colleagues describe the difference between hypothesis testing and power analysis, discuss the advantages of longitudinal versus cross-sectional studies, and provide a series of examples to

illustrate the statistical issues that need to be considered when designing a study or assessing the validity of the results of a completed study.

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